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Mar 14, 2002

DOCUMENT-IDENTIFIER: US 20020032510 A1

TITLE: Vehicle rearview mirror assembly incorporating a communication system

Summary of Invention Paragraph (3):

[0004] Vehicle communication and control systems are commercially available that provide a wide variety of communication and control functions. An example of such a system is the ONSTAR.RTM. system from General Motors Corporation. Another example of such a system is disclosed in U.S. Pat. No. 6,028,537. Each of these systems includes a cellular telephone, a vehicle position identification system (specifically GPS), a processor, and a connection to the vehicle bus. These interconnected elements not only provide for conventional hands-free telephone operation, but also enable a number of other communication operations and remote vehicle control functions. For example, such a system may automatically call 9-1-1 and transmit the vehicle location (as provided by the GPS) when the vehicle air bags inflate, or enable a driver to request roadside assistance or ask for navigational directions at the touch of a button. These systems also enable remote control of vehicle functions such as remote door locking or unlocking and reprogramming/personalization of vehicle accessories. Additionally, such systems may provide for remote diagnostics of the vehicle. The systems may also allow for transmittal and reception of text/paging messages and enable the vehicle to be tracked by the owner or the police.

Summary of Invention Paragraph (26):

[0026] According to another embodiment of the present invention, a vehicle rearview assembly provides an image of a scene to the rear of the driver of the vehicle. The rearview assembly comprises a mounting structure for mounting to the vehicle, an audio and data transceiver supported by the mounting structure, capable of receiving both audio and data signals from at least one remote device associated with the vehicle, a control circuit coupled to the audio and data transceiver, the control circuit processes a data signal received by the audio and data transceiver that are received from a remote device associated with the vehicle, and generates a control signal in response to such a data signal.

Detail Description Paragraph (100):

[0186] A transceiver located in the vehicle rearview mirror assembly may also be used to energize and/or receive confirmation of the presence of a transponder on the ignition key or in a key fob. In the absence of such confirmation, the control circuit in the rearview mirror may transmit a signal preventing starting of the vehicle. Alternatively, the vehicle engine modules may be programmed not to start the engine in the absence of a signal from the rearview mirror indicating that the proper signal is received from the transponder on the vehicle owner's key or key fob. The transceiver in the rearview mirror may continue to interrogate the transponder and disable the vehicle if the transponder is no longer present. By placing the rearview mirror in this vehicle control loop, the vehicle will not start if a thief removes the rearview mirror assembly from the vehicle in an effort to remove the remote vehicle tracking feature from the vehicle.

Detail Description Paragraph (106):

[0192] By providing sufficient memory in system 100, the system may be utilized as a data/accident recorder or black box. The black box may store information such as the speed the vehicle was traveling prior to a crash. Other accident reconstruction information can also be stored such as readings from gyroscopes, suspension systems, air bag deployment sensors, roll sensors, GPS data, and other devices or sensors that

indicate dynamics of a crash. The memory may also store a history of the speed, direction, driver input, ambient temperature, and other information available on the vehicle bus or other interface, such that this information may be read from memory to prove that the vehicle was traveling at a specific speed to either serve as additional evidence that a speeding ticket was or was not warranted.